

BALLAST WATER MANAGEMENT TECHNOLOGIES

Regulation D-3 of the BWM Convention requires that ballast water management systems used, to comply with the Convention, must be approved by the Administration taking into account the Guidelines for approval of ballast water management systems (G8).

In order to be type-approved by an Administration, ballast water management systems need to be tested in a land-based facility and on board ships to prove that they meet the performance standard contained in regulation D-2 of the BWM Convention. Guidelines (G8) provide the technical specifications and the approval and certification procedures to be used by the Administration when granting Type Approval. Successful fulfillment of the provisions contained in Guidelines (G8) should lead to the issuance of a Type Approval Certificate, which allows ballast water management system to be used on board ship.

Regulation D-3 also requires that ballast water management systems which make use of Active Substances, to comply with the Convention, shall be approved by IMO in accordance with the 'Procedure for approval of ballast water management systems that make use of Active Substances (G9)'. Procedure (G9) consists of a two-tier process - Basic Approval and Final Approval- to ensure that the ballast water management system does not pose unreasonable risk to the environment, human health, property or resources.

[Lists of Ballast Water Management Systems, which received Type Approval Certification, Basic and Final Approval as of October 2008](#)

Table (1) – List of ballast water management systems which received Type Approval Certification *

| | Name of the system | Name of manufacturer | Administration issuing Type Approval Certificate | Date of Certification |
|---|---|---------------------------------|---|------------------------------|
| 1 | PureBallast System | Alfa Laval / Wallenius Water AB | Norway | June 2008 |
| 2 | SEDNA® Ballast Water Management System (Using Peraclean® Ocean) | Degussa Gmbh, Germany | Germany | June 2008 |

* This list was compiled based on the information provided by the respective Administrations.

Table (2) – List of ballast water management systems that make use of Active Substances which received Basic Approval*

| | Name of the system and proposing country | Name of manufacturer | Date of Basic Approval |
|----|--|--|-------------------------------|
| 1 | SEDNA® Ballast Water Management System (Using Peraclean® Ocean), Germany | Degussa GmbH, Germany | 24 March 2006 |
| 2 | Electro-Clean (electrolytic disinfection) system (subsequently changed to Electro-Cleen™), the Republic of Korea | Techcross Ltd. and Korea Ocean Research and Development Institute (KORDI) | 24 March 2006 |
| 3 | Special Pipe Ballast Water Management System (combined with Ozone treatment), Japan | Japan Association of Marine Safety (JAMS) | 13 October 2006 |
| 4 | EctoSys™ electrochemical System, Sweden | Permascand AB, Sweden, subsequently acquired by RWO GmbH, Germany | 13 October 2006 |
| 5 | PureBallast System, Sweden | Alfa Laval/ Wallenius Water AB | 13 July 2007 |
| 6 | NK Ballast Water Treatment System, the Republic of Korea | NK Company Ltd., the Republic of Korea | 13 July 2007 |
| 7 | Hitachi Ballast Water Purification System (ClearBallast), Japan | Hitachi, Ltd. /Hitachi Plant technologies, Ltd. | 4 April 2008 |
| 8 | Resource Ballast Technologies System, South Africa | Resource Ballast Technologies (Pty) Ltd. | 4 April 2008 |
| 9 | GloEn-Patrol™ Ballast Water Management System, the Republic of Korea | Panasia Co., Ltd. | 4 April 2008 |
| 10 | OceanSaver® Ballast Water Management System (OS BWMS), Norway | MetaFil AS | 4 April 2008 |
| 11 | TG Ballastcleaner and TG Environmentalguard System, Japan | The Toagosei Group (TG Corporation, Toagosei Co. Ltd. and Tsurumi Soda Co. Ltd.) | 10 October 2008 |
| 12 | Greenship's Ballast Water Management System, the Netherlands | Greenship Ltd | 10 October 2008 |
| 13 | Ecochlor® Ballast Water Treatment System, Germany | Ecochlor, INC, Acton, the United States | 10 October 2008 |

*More comprehensive information regarding these systems is available in document BWM.2/Circ.16.

**Table (3) – List of ballast water management systems that make use of Active Substances
which received Final Approval***

| | Name of the system and proposing country | Name of manufacturer | Date of Final Approval |
|---|--|---|-------------------------------|
| 1 | PureBallast System, Norway | Alfa Laval / Wallenius Water AB | 13 July 2007 |
| 2 | SEDNA® Ballast Water Management System (Using Peraclean® Ocean), Germany | Degussa GmbH, Germany | 4 April 2008 |
| 3 | Electro-Cleen™ System, the Republic of Korea | Techcross Ltd. and Korea Ocean Research and Development Institute (KORDI) | 10 October 2008 |
| 4 | OceanSaver® Ballast Water Management System (OS BWMS), Norway | MetaFil AS | 10 October 2008 |

*More comprehensive information regarding these systems is available in document BWM.2/Circ.16.